

## PLUS Search Results for S/N 10642933, Searched January 27, 2006

The Patent Linguistics Utility System (PLUS) is a USPTO automated search system for U.S. Patents from 1971 to the present. PLUS is a query-by-example search system which produces a list of patents that are most closely related linguistically to the application searched. This search was prepared by the staff of the Scientific and Technical Information Center, SIRA.

6462469  
6617609  
6707248  
6765350  
6852555  
6891326  
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6451415  
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4913744  
4780075  
5223083  
5358599  
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5800666

Most Frequently Occurring Classifications of Patents Returned  
From A Search of 10642933 on January 27, 2006

Original Classifications

5	313/504
3	313/506
3	428/690
3	438/22
2	313/479
2	313/503
2	315/169.3
2	438/701

Cross-Reference Classifications

11	313/504
6	428/917
5	257/40
4	438/99
3	136/263
3	313/505
3	313/506
3	428/690
2	136/252
2	257/461
2	257/99
2	257/E21.008
2	257/E21.027
2	257/E21.232
2	257/E21.257
2	257/E21.314
2	257/E51.017
2	438/82
2	445/24
2	528/377

Combined Classifications

16	313/504
6	257/40
6	313/506
6	428/690
6	428/917
4	438/99
3	136/263
3	313/503
3	313/505
3	438/22
2	136/252
2	136/256
2	252/62.2
2	257/461
2	257/99
2	257/E21.008
2	257/E21.027
2	257/E21.232
2	257/E21.257
2	257/E21.314
2	257/E51.017
2	313/479
2	313/512
2	315/169.3
2	359/270
2	428/209

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2 438/701  
2 438/82  
2 445/24  
2 528/377

10642933\_CLSTITLES1.txt

Titles of Most Frequently Occurring Classifications of Patents Returned  
From A Search of 10642933 on January 27, 2006

16 313/504 (5 OR, 11 XR)  
Class 313 : ELECTRIC LAMP AND DISCHARGE DEVICES  
313/483 WITH LUMINESCENT SOLID OR LIQUID MATERIAL  
313/498 .Solid-state type  
313/503 ..With particular phosphor or electrode  
material  
313/504 ...Organic phosphor

6 257/40 (1 OR, 5 XR)  
Class 257 : ACTIVE SOLID-STATE DEVICES  
257/40 ORGANIC SEMICONDUCTOR MATERIAL

6 313/506 (3 OR, 3 XR)  
Class 313 : ELECTRIC LAMP AND DISCHARGE DEVICES  
313/483 WITH LUMINESCENT SOLID OR LIQUID MATERIAL  
313/498 .Solid-state type  
313/506 ..Plural layers

6 428/690 (3 OR, 3 XR)  
Class 428 : STOCK MATERIAL OR MISCELLANEOUS ARTICLES  
428/411.1 COMPOSITE (NONSTRUCTURAL LAMINATE)  
428/688 .of inorganic material  
428/689 ..Metal-compound-containing layer  
428/690 ...Fluorescent, phosphorescent, or luminescent  
layer

6 428/917 (0 OR, 6 XR)  
Class 428 : STOCK MATERIAL OR MISCELLANEOUS ARTICLES  
428/917 ELECTROLUMINESCENT

4 438/99 (0 OR, 4 XR)  
Class 438 : SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS  
438/99 HAVING ORGANIC SEMICONDUCTIVE COMPONENT

3 136/263 (0 OR, 3 XR)  
Class 136 : BATTERIES: THERMOELECTRIC AND PHOTOELECTRIC  
136/243 PHOTOELECTRIC  
136/252 .Cells  
136/263 ..Organic active material containing

3 313/503 (2 OR, 1 XR)  
Class 313 : ELECTRIC LAMP AND DISCHARGE DEVICES  
313/483 WITH LUMINESCENT SOLID OR LIQUID MATERIAL  
313/498 .Solid-state type  
313/503 ..With particular phosphor or electrode  
material

3 313/505 (0 OR, 3 XR)  
Class 313 : ELECTRIC LAMP AND DISCHARGE DEVICES  
313/483 WITH LUMINESCENT SOLID OR LIQUID MATERIAL  
313/498 .Solid-state type  
313/505 ..With electrode matrix

3 438/22 (3 OR, 0 XR)  
Class 438 : SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS  
438/22 MAKING DEVICE OR CIRCUIT EMISSIVE OF

10642933\_CLSTITLES1.txt  
NONELECTRICAL SIGNAL

2 136/252 (0 OR, 2 XR)  
Class 136 : BATTERIES: THERMOELECTRIC AND PHOTOELECTRIC  
136/243 PHOTOLELECTRIC  
136/252 .Cells

2 136/256 (1 OR, 1 XR)  
Class 136 : BATTERIES: THERMOELECTRIC AND PHOTOELECTRIC  
136/243 PHOTOLELECTRIC  
136/252 .Cells  
136/256 ..Contact, coating, or surface geometry

2 252/62.2 (1 OR, 1 XR)  
Class 252 : COMPOSITIONS  
252/62.2 ELECTROLYTES FOR ELECTRICAL DEVICES (E.G.,  
RECTIFIER, CONDENSER)

2 257/461 (0 OR, 2 XR)  
Class 257 : ACTIVE SOLID-STATE DEVICES  
257/414 RESPONSIVE TO NON-ELECTRICAL SIGNAL (E.G.,  
CHEMICAL, STRESS, LIGHT, OR MAGNETIC FIELD SENSORS)  
257/428 .Electromagnetic or particle radiation  
257/431 ..Light  
257/461 ...Light responsive pn junction

2 257/99 (0 OR, 2 XR)  
Class 257 : ACTIVE SOLID-STATE DEVICES  
257/79 INCOHERENT LIGHT EMITTER STRUCTURE  
257/99 .with housing or contact structure

2 257/E21.008 (0 OR, 2 XR)  
Class 257 : ACTIVE SOLID-STATE DEVICES  
257/E21.001 PROCESSES OR APPARATUS ADAPTED FOR MANUFACTURE  
OR TREATMENT OF SEMICONDUCTOR OR SOLID-STATE DEVICES  
OR OF  
PARTS THEREOF (EPO)  
257/E21.002 .Manufacture or treatment of semiconductor  
device (EPO)  
257/E21.003 ..Manufacture of two-terminal component for  
integrated circuit (EPO)  
257/E21.008 ...Of capacitor (EPO)

2 257/E21.027 (0 OR, 2 XR)  
Class 257 : ACTIVE SOLID-STATE DEVICES  
257/E21.001 PROCESSES OR APPARATUS ADAPTED FOR MANUFACTURE  
OR TREATMENT OF SEMICONDUCTOR OR SOLID-STATE DEVICES  
OR OF  
PARTS THEREOF (EPO)  
257/E21.002 .Manufacture or treatment of semiconductor  
device (EPO)  
257/E21.023 ..Making mask on semiconductor body for  
further photolithographic processing (EPO)  
257/E21.024 ...Comprising organic layer (EPO)  
257/E21.026 ....Characterized by treatment of photoresist  
layer (EPO)  
257/E21.027 .....Photolithographic process (EPO)

2 257/E21.232 (0 OR, 2 XR)  
Class 257 : ACTIVE SOLID-STATE DEVICES  
257/E21.001 PROCESSES OR APPARATUS ADAPTED FOR MANUFACTURE

10642933\_CLSTITLES1.txt  
OR TREATMENT OF SEMICONDUCTOR OR SOLID-STATE

DEVICES OR OF

257/E21.002 .PARTS THEREOF (EPO)  
257/E21.002 ..Manufacture or treatment of semiconductor device (EPO)  
257/E21.04 ..Device having at least one potential-jump barrier or surface barrier, e.g., PN junction, depletion layer, carrier concentration layer (EPO)  
257/E21.085 ...Device having semiconductor body comprising Group IV elements or Group III-V compounds with or without impurities, e.g., doping materials (EPO)  
257/E21.211 ....Treatment of semiconductor body using process other than deposition of semiconductor material on a substrate, diffusion or alloying of impurity material, or radiation treatment (EPO)  
257/E21.214 .....To change their surface-physical characteristics or shape, e.g., etching, polishing, cutting (EPO)  
257/E21.215 .....Chemical or electrical treatment, e.g., electrolytic etching (EPO)  
257/E21.231 .....Using mask (EPO)  
257/E21.232 .....Characterized by their composition, e.g., multilayer masks, materials (EPO)

2 257/E21.257 (0 OR, 2 XR)

Class 257 : ACTIVE SOLID-STATE DEVICES  
257/E21.001 PROCESSES OR APPARATUS ADAPTED FOR MANUFACTURE  
OR TREATMENT OF SEMICONDUCTOR OR SOLID-STATE

DEVICES OR OF

257/E21.002 .PARTS THEREOF (EPO)  
257/E21.002 ..Manufacture or treatment of semiconductor device (EPO)  
257/E21.04 ..Device having at least one potential-jump barrier or surface barrier, e.g., PN junction, depletion layer, carrier concentration layer (EPO)  
257/E21.085 ...Device having semiconductor body comprising Group IV elements or Group III-V compounds with or without impurities, e.g., doping materials (EPO)  
257/E21.211 ....Treatment of semiconductor body using process other than deposition of semiconductor material on a substrate, diffusion or alloying of impurity material, or radiation treatment (EPO)  
257/E21.214 .....To change their surface-physical characteristics or shape, e.g., etching, polishing, cutting (EPO)  
257/E21.24 ..To form insulating layer thereon, e.g., for masking or by using photolithographic technique (EPO)  
257/E21.241 .....Post-treatment (EPO)  
257/E21.249 .....Etching insulating layer by chemical or physical means (EPO)  
257/E21.257 .....Using mask (EPO)

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2 257/E21.314 (0 OR, 2 XR)  
Class 257 : ACTIVE SOLID-STATE DEVICES  
257/E21.001 PROCESSES OR APPARATUS ADAPTED FOR MANUFACTURE  
OR TREATMENT OF SEMICONDUCTOR OR SOLID-STATE  
DEVICES OR OF  
257/E21.002 .Manufacture or treatment of semiconductor  
device (EPO)  
257/E21.04 ..Device having at least one potential-jump  
barrier or surface barrier, e.g., PN junction,  
depletion  
257/E21.085 ...Device having semiconductor body comprising  
Group IV elements or Group III-V compounds with or  
without  
257/E21.211 ....Treatment of semiconductor body using  
process other than deposition of semiconductor  
material on  
material, or  
257/E21.214 .....To change their surface-physical  
characteristics or shape, e.g., etching, polishing,  
cutting  
257/E21.294 .....Deposition/post-treatment of  
noninsulating, e.g., conductive - or resistive -  
layers on  
257/E21.3 .....Post treatment (EPO)  
257/E21.305 .....Physical or chemical etching of layer,  
e.g., to produce a patterned layer from pre-deposited  
extensive layer (EPO)  
257/E21.314 .....Using mask (EPO)

2 257/E51.017 (0 OR, 2 XR)  
Class 257 : ACTIVE SOLID-STATE DEVICES  
257/E51.001 ORGANIC SOLID STATE DEVICES, PROCESSES OR  
APPARATUS PECULIAR TO MANUFACTURE OR TREATMENT OF SUCH  
DEVICES OR OF PARTS THEREOF  
257/E51.002 ..Structural detail of device (EPO)  
257/E51.012 ..Radiation-sensitive organic solid-state  
device (EPO)  
257/E51.017 ...Comprising organic semiconductor-organic  
semiconductor heterojunction (EPO)

2 313/479 (2 OR, 0 XR)  
Class 313 : ELECTRIC LAMP AND DISCHARGE DEVICES  
313/364 CATHODE RAY TUBE  
313/477R .Envelope  
313/479 ..Coating or shielding

2 313/512 (1 OR, 1 XR)  
Class 313 : ELECTRIC LAMP AND DISCHARGE DEVICES  
313/483 WITH LUMINESCENT SOLID OR LIQUID MATERIAL  
313/498 .Solid-state type  
313/512 ..With envelope or encapsulation

2 315/169.3 (2 OR, 0 XR)  
Class 315 : ELECTRIC LAMP AND DISCHARGE DEVICES: SYSTEMS

315/160 PLURAL POWER SUPPLIES  
 315/167 .Plural cathode and/or anode load device  
 315/169.1 ..Diverse-type energizing or bias supplies to  
     different electrodes  
 315/169.3 ...Electroluminescent device

2 359/270 (1 OR, 1 XR)  
 Class 359 : OPTICS: SYSTEMS  
 359/237 OPTICAL MODULATOR  
 359/238 .Light wave temporal modulation (e.g.,  
     frequency, amplitude, etc.)  
 359/240 ..Changing bulk optical parameter  
 359/245 ...Electro-optic  
 359/265 ....Electrochromic  
 359/267 .....Reflection-type (e.g., display device)  
 359/270 .....Particular electrolyte layer

2 428/209 (1 OR, 1 XR)  
 Class 428 : STOCK MATERIAL OR MISCELLANEOUS ARTICLES  
 428/98 STRUCTURALLY DEFINED WEB OR SHEET (E.G.,  
     OVERALL DIMENSION, ETC.)  
 428/195.1 .Discontinuous or differential coating,  
     impregnation or bond (e.g., artwork, printing, retouched  
     photograph, etc.)  
 428/209 ..Including metal layer

2 438/701 (2 OR, 0 XR)  
 Class 438 : SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS  
 438/689 CHEMICAL ETCHING  
 438/694 .Combined with coating step  
 438/700 ..Formation of groove or trench  
 438/701 ...Tapered configuration

2 438/82 (0 OR, 2 XR)  
 Class 438 : SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS  
 438/51 ..Packaging (e.g., with mounting,  
     encapsulating, etc.) or treatment of packaged  
     semiconductor  
 438/57 .Responsive to electromagnetic radiation  
 438/82 ..Having organic semiconductor component

2 445/24 (0 OR, 2 XR)  
 Class 445 : ELECTRIC LAMP OR SPACE DISCHARGE COMPONENT OR  
     DEVICE MANUFACTURING  
 445/1 PROCESS  
 445/23 .With assembly or disassembly  
 445/24 ..Display or gas panel making

2 528/377 (0 OR, 2 XR)  
 Class 528 : SYNTHETIC RESINS OR NATURAL RUBBERS -- PART  
     OF THE CLASS 520 SERIES  
 528/373 .FROM SULFUR-CONTAINING REACTANT  
 528/377 ..From heterocyclic compound containing a  
     sulfur atom as a ring member

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S52	2	"6333145".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:02
S53	8043	alkylenedioxithiophene or polythiophene	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:27
S54	276	S53 and (polyphosphoric or cyclohexadiene or polyhydroxy or thiaalkanedicarboxylic)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:24
S55	77	S53 same (polyphosphoric or cyclohexadiene or polyhydroxy or thiaalkanedicarboxylic)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:03
S56	65	S55 and ((layer near configuration) or (light near emitting) or photovoltaic or (solar near cell) or transistor or electroluminescent)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:11
S57	57	S56 and polyanion	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:12
S58	3	S57 and (dihydro near thieno)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:05
S59	157	S54 and ((layer near configuration) or (light near emitting) or photovoltaic or (solar near cell) or transistor or electroluminescent)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:12

## EAST Search History

S60	78	S59 and polyanion	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:12
S61	78	S60 and ((layer near configuration) or (light near emitting) or photovoltaic or (solar near cell) or transistor or electroluminescent)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:13
S62	18	S61 and (oxy near alkylene near oxy)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:19
S63	18	S62 and (tetronic or dihydroxybenzene or sulpho or sulphonate)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:20
S64	13	S55 and (oxy near alkylene near oxy)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:19
S65	13	S64 and (tetronic or dihydroxybenzene or sulpho or sulphonate)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:20
S66	135	S53 and (polyphosphoric or thiaalkanedicarboxylic or cyclohexadiene)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:25
S67	14	S53 same (polyphosphoric or thiaalkanedicarboxylic or cyclohexadiene)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:27

## EAST Search History

S68	192	alkylenedioxythiophene	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:27
S69	6	S68 same (polyphosphoric or thiaalkanedicarboxylic or cyclohexadiene)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:27

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2	"6333145".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:02
L2	8043	alkylenedioxithiophene or polythiophene	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:27
L3	276	L2 and (polyphosphoric or cyclohexadiene or polyhydroxy or thiaalkanedicarboxylic)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:24
L4	77	L2 same (polyphosphoric or cyclohexadiene or polyhydroxy or thiaalkanedicarboxylic)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:03
L5	65	L4 and ((layer near configuration) or (light near emitting) or photovoltaic or (solar near cell) or transistor or electroluminescent)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:11
L6	57	L5 and polyanion	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:12
L7	3	L6 and (dihydro near thieno)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:05
L8	157	L3 and ((layer near configuration) or (light near emitting) or photovoltaic or (solar near cell) or transistor or electroluminescent)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:12

## EAST Search History

L9	78	L8 and polyanion	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:12
L10	78	L9 and ((layer near configuration) or (light near emitting) or photovoltaic or (solar near cell) or transistor or electroluminescent)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:13
L11	18	L10 and (oxy near alkylene near oxy)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:19
L12	18	L11 and (tetronic or dihydroxybenzene or sulpho or sulphonate)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:20
L13	13	L4 and (oxy near alkylene near oxy)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:19
L14	13	L13 and (tetronic or dihydroxybenzene or sulpho or sulphonate)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:20
L15	135	L2 and (polyphosphoric or thiaalkanedicarboxylic or cyclohexadiene)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:25
L16	14	L2 same (polyphosphoric or thiaalkanedicarboxylic or cyclohexadiene)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:27

## EAST Search History

L17	192	alkylenedioxythiophene	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:27
L18	6	L17 same (polyphosphoric or thiaalkanedicarboxylic or cyclohexadiene)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:27